FIG. 1

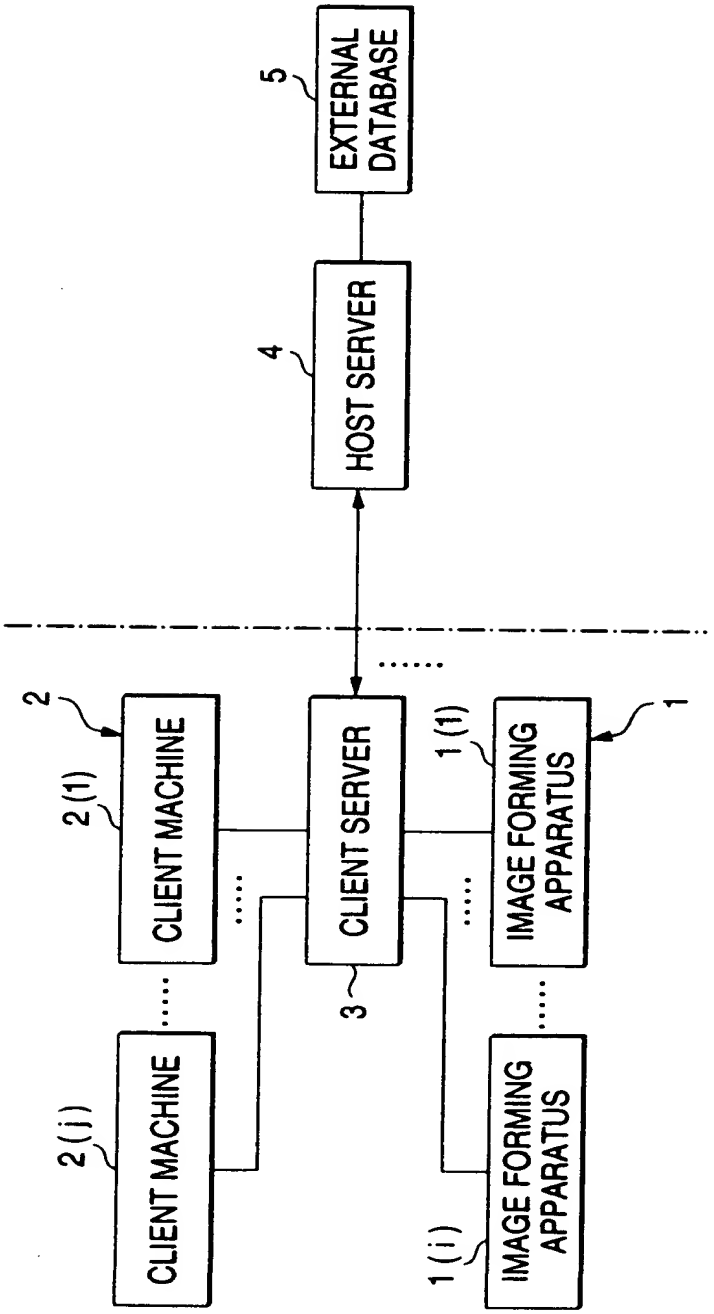


FIG. 2

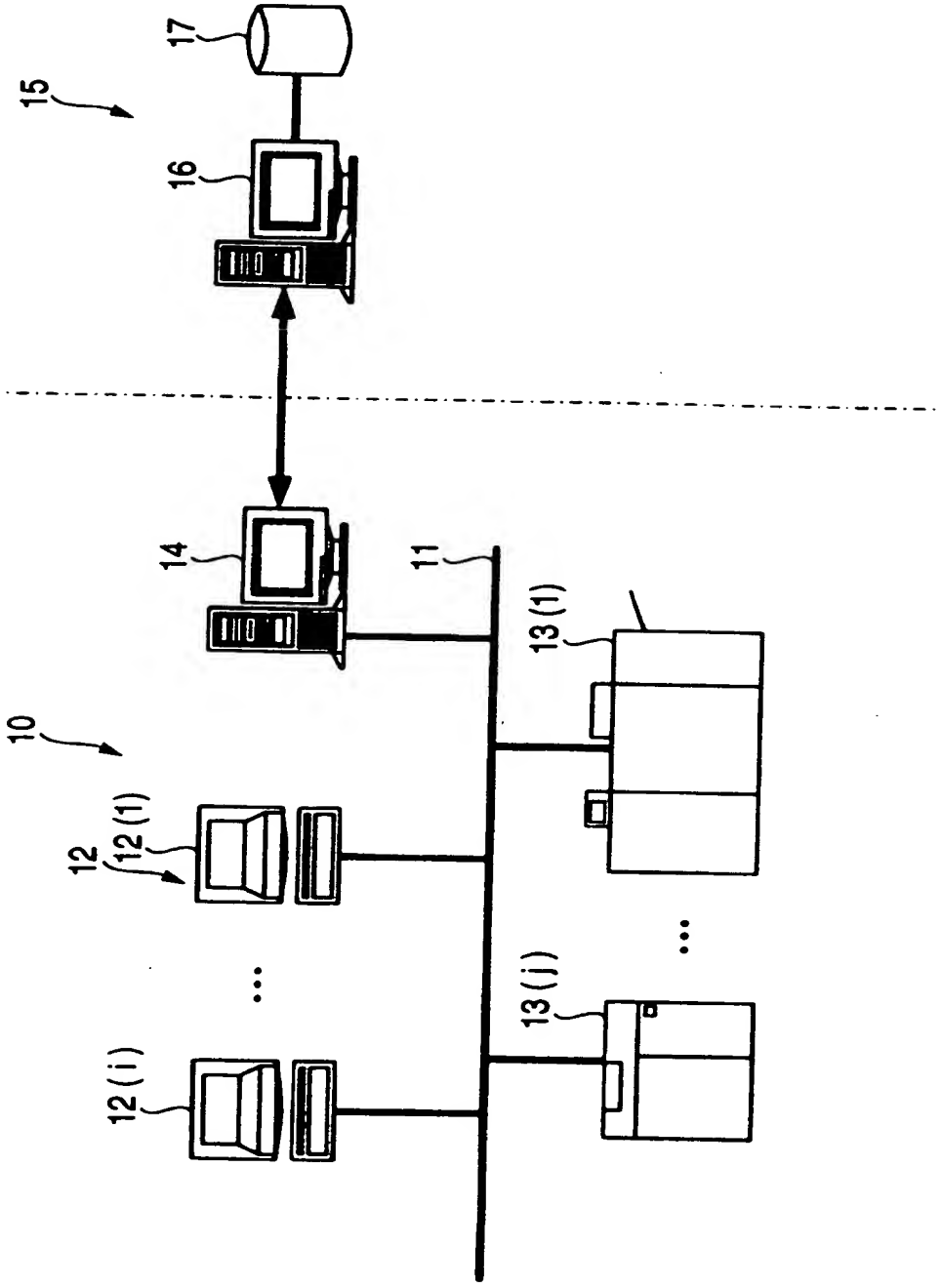
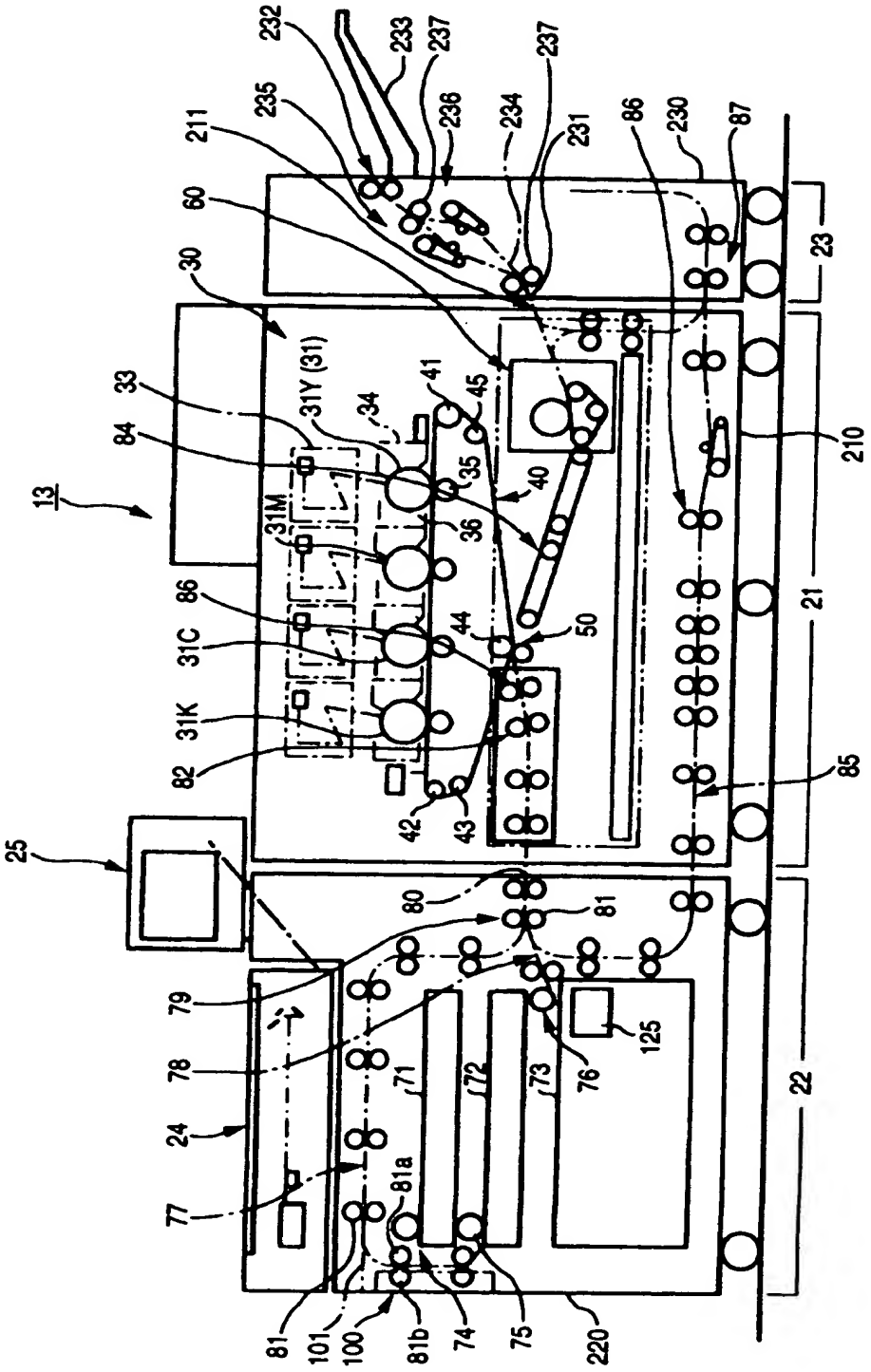


FIG. 3


232
233
237
237
235
236
234
231
86
230
87
211
60
23
30
31Y (31)
33
34
41
45
84
35
40
210
13
31M
36
86
31C
44
50
31K
82
42
43
85
25
80
81
79
125
78
71
72
73
76
22
24
81a
77
81
101
100
81b
74
75
220

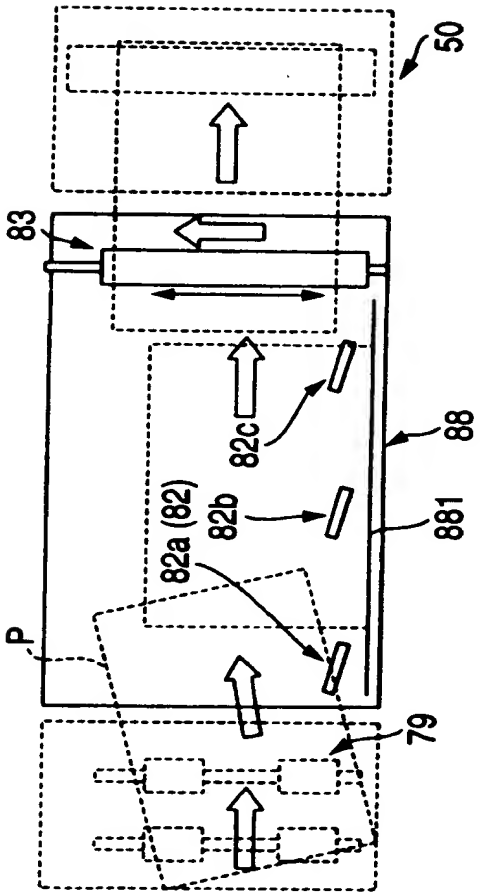

50
83
82c
88
82b
82a (82)
881
P
79

FIG. 4A

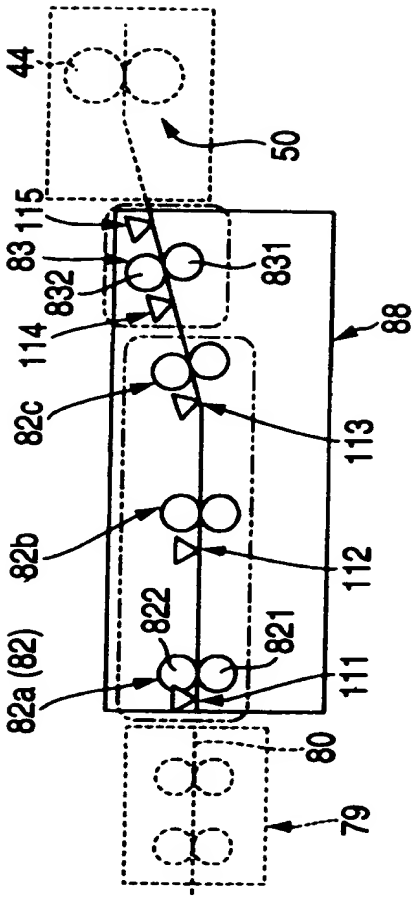

44
50
115
83
831
832
114
88
82c
113
82b
112
822
821
82a (82)
111
80
79

FIG. 4B

FIG. 5A

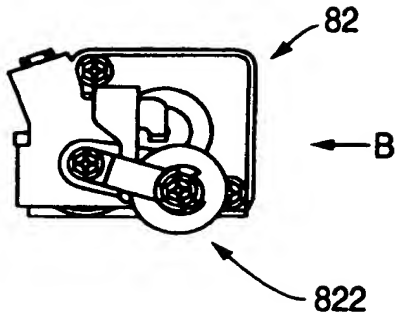


FIG. 5B

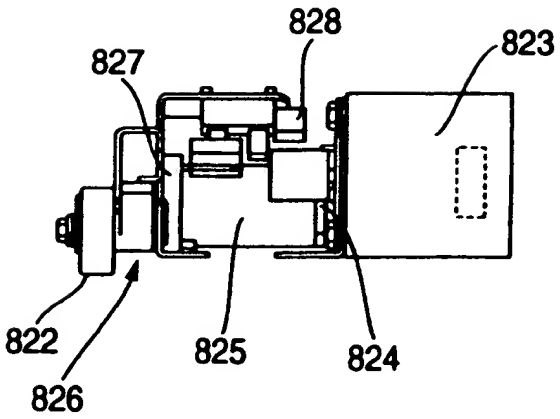


FIG. 6

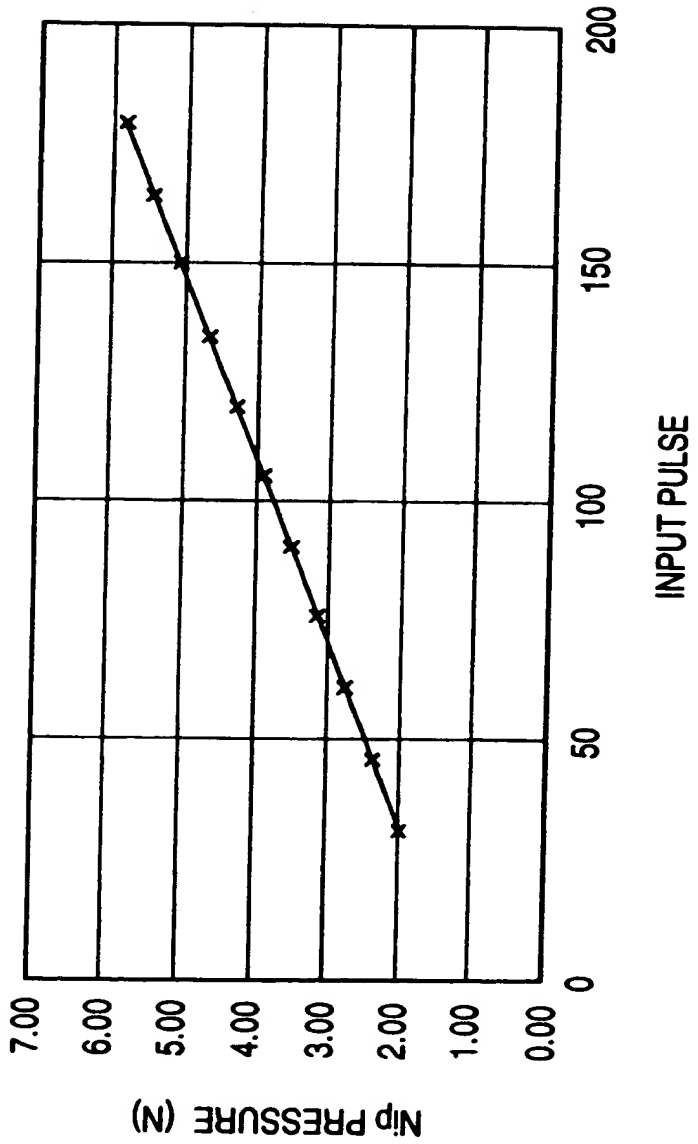

Nip PRESSURE (N)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
50
100
150
200
INPUT PULSE

FIG. 7A

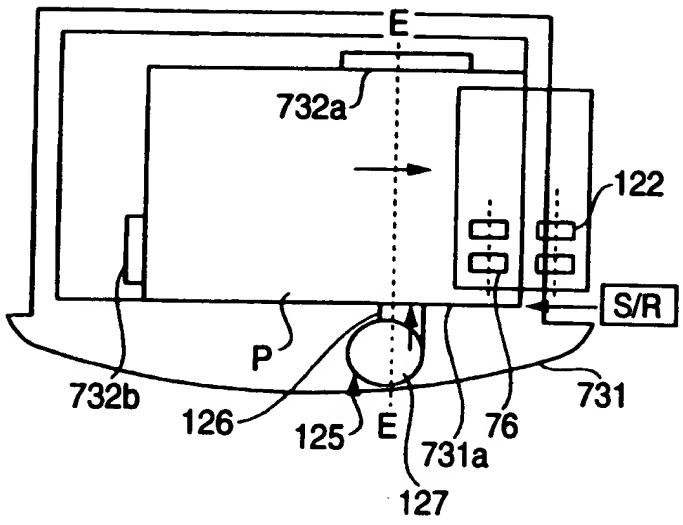

E
732a
122
S/R
P
732b
126
125
E
731a
76
731
127

FIG. 7B

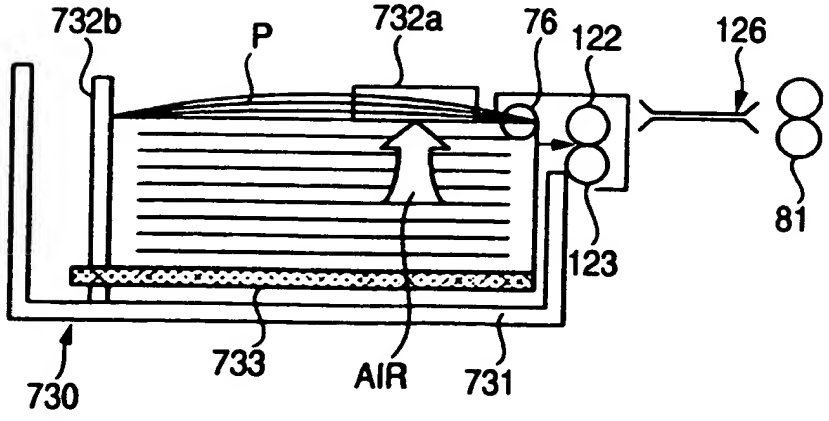

732b
P
732a
76
122
126
81
123
730
733
AIR
731

FIG. 8

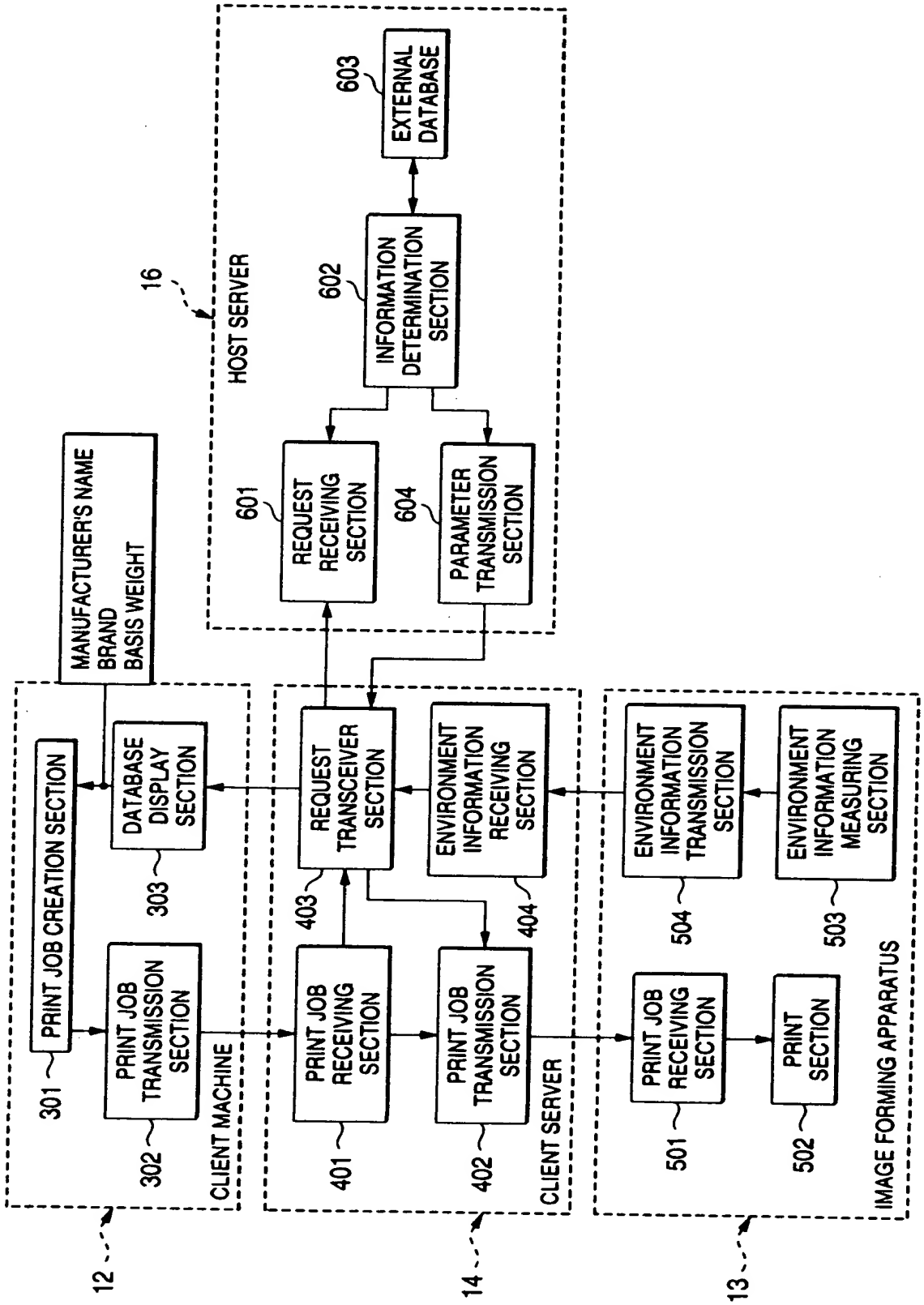

16
HOST SERVER
603
EXTERNAL DATABASE
602
INFORMATION DETERMINATION SECTION
601
REQUEST RECEIVING SECTION
604
PARAMETER TRANSMISSION SECTION
MANUFACTURER'S NAME
BRAND
BASIS WEIGHT
PRINT JOB CREATION SECTION
301
DATABASE DISPLAY SECTION
303
PRINT JOB TRANSMISSION SECTION
302
CLIENT MACHINE
12
REQUEST TRANSCEIVER SECTION
403
ENVIRONMENT INFORMATION RECEIVING SECTION
404
PRINT JOB RECEIVING SECTION
401
PRINT JOB TRANSMISSION SECTION
402
CLIENT SERVER
14
ENVIRONMENT INFORMATION TRANSMISSION SECTION
504
ENVIRONMENT INFORMATION MEASURING SECTION
503
PRINT JOB RECEIVING SECTION
501
PRINT SECTION
502
IMAGE FORMING APPARATUS
13

FIG. 9

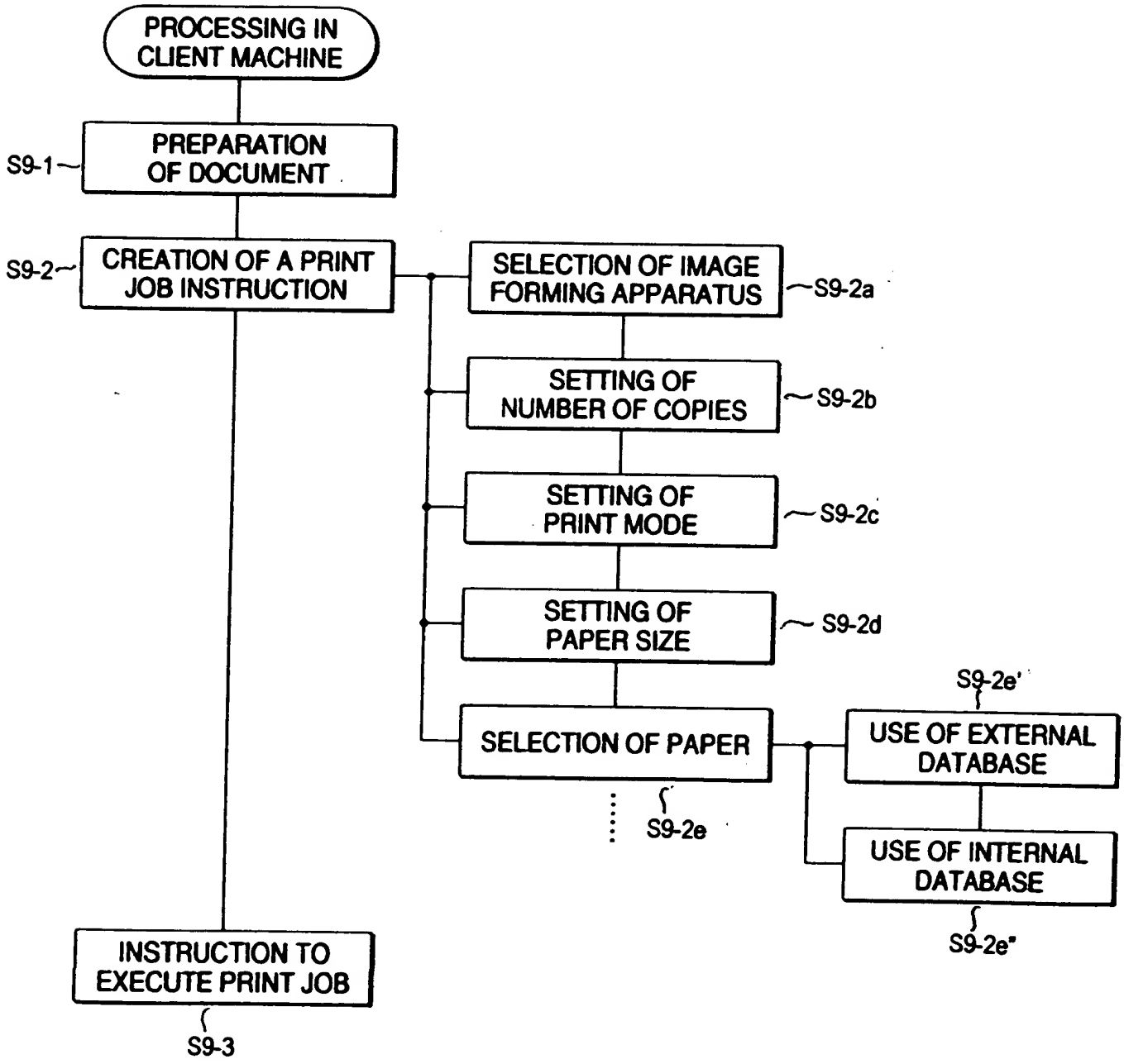

PROCESSING IN CLIENT MACHINE
S9-1
PREPARATION OF DOCUMENT
S9-2
CREATION OF A PRINT JOB INSTRUCTION
SELECTION OF IMAGE FORMING APPARATUS
S9-2a
SETTING OF NUMBER OF COPIES
S9-2b
SETTING OF PRINT MODE
S9-2c
SETTING OF PAPER SIZE
S9-2d
SELECTION OF PAPER
S9-2e
S9-2e'
USE OF EXTERNAL DATABASE
USE OF INTERNAL DATABASE
S9-2e"
INSTRUCTION TO EXECUTE PRINT JOB
S9-3

FIG. 10

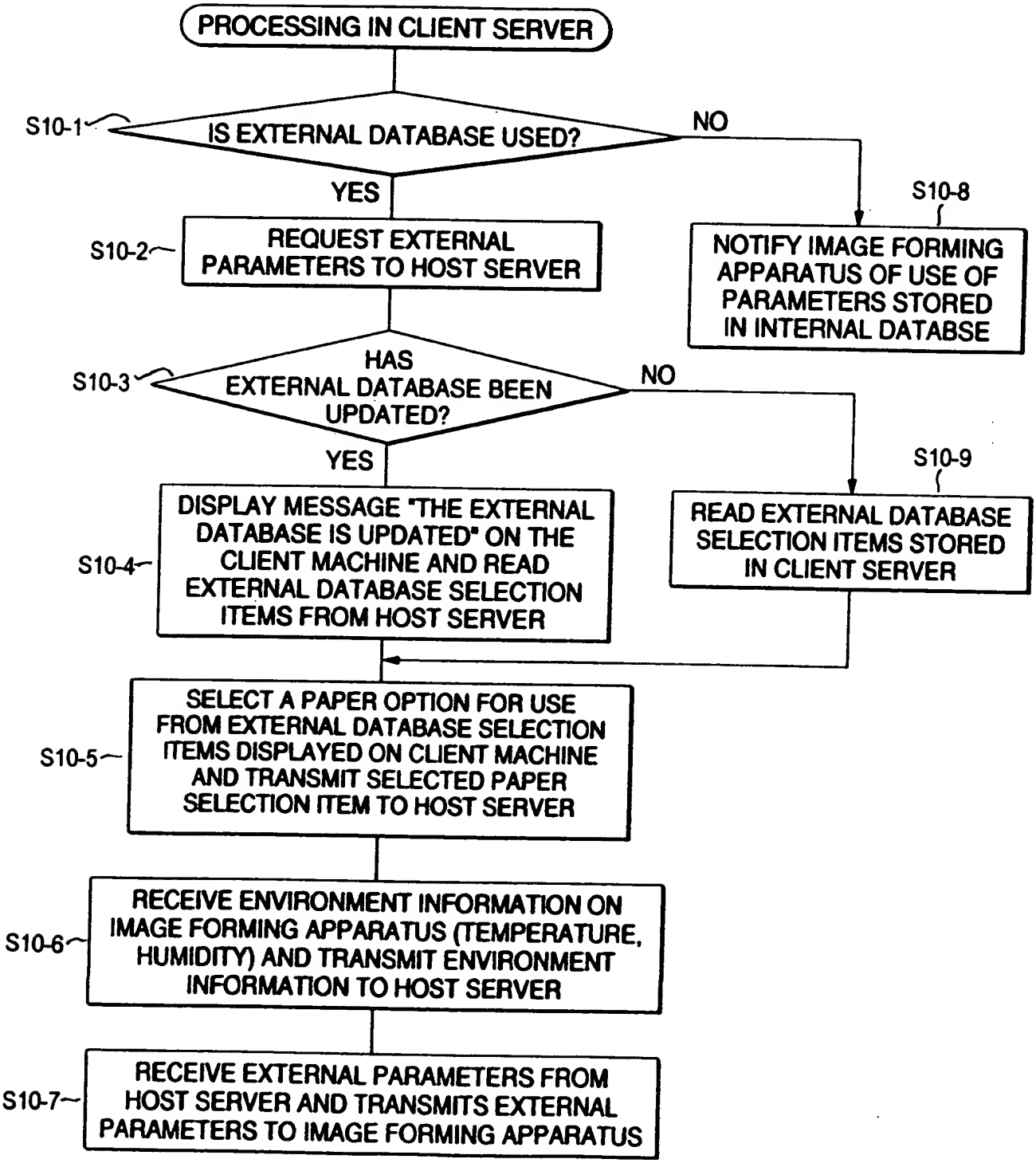

PROCESSING IN CLIENT SERVER
S10-1
IS EXTERNAL DATABASE USED?
NO
YES
S10-8
NOTIFY IMAGE FORMING APPARATUS OF USE OF PARAMETERS STORED IN INTERNAL DATABSE
S10-2
REQUEST EXTERNAL PARAMETERS TO HOST SERVER
S10-3
HAS EXTERNAL DATABASE BEEN UPDATED?
NO
YES
S10-9
READ EXTERNAL DATABASE SELECTION ITEMS STORED IN CLIENT SERVER
S10-4
DISPLAY MESSAGE "THE EXTERNAL DATABASE IS UPDATED" ON THE CLIENT MACHINE AND READ EXTERNAL DATABASE SELECTION ITEMS FROM HOST SERVER
S10-5
SELECT A PAPER OPTION FOR USE FROM EXTERNAL DATABASE SELECTION ITEMS DISPLAYED ON CLIENT MACHINE AND TRANSMIT SELECTED PAPER SELECTION ITEM TO HOST SERVER
S10-6
RECEIVE ENVIRONMENT INFORMATION ON IMAGE FORMING APPARATUS (TEMPERATURE, HUMIDITY) AND TRANSMIT ENVIRONMENT INFORMATION TO HOST SERVER
S10-7
RECEIVE EXTERNAL PARAMETERS FROM HOST SERVER AND TRANSMITS EXTERNAL PARAMETERS TO IMAGE FORMING APPARATUS

FIG. 11

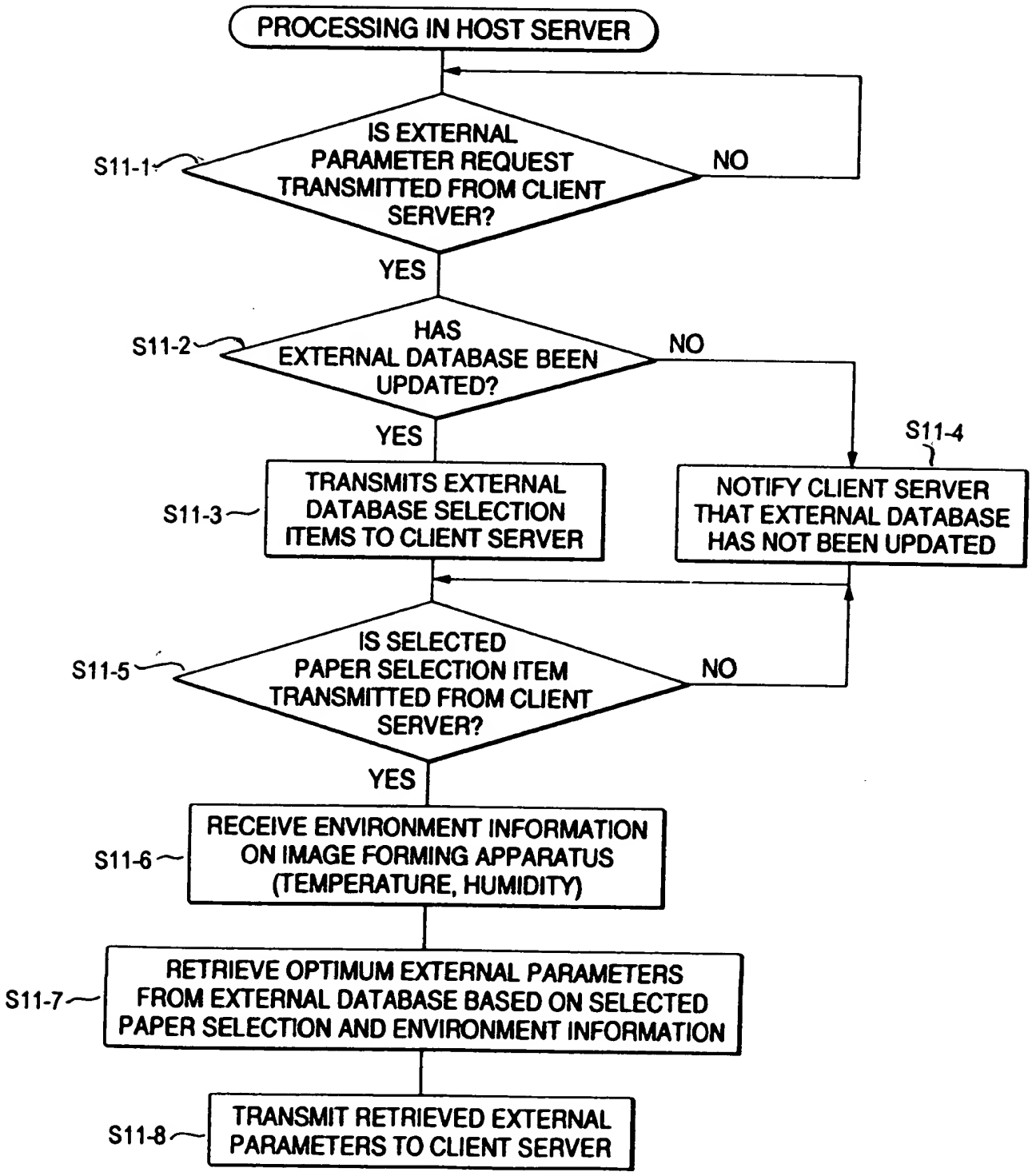

PROCESSING IN HOST SERVER
S11-1
IS EXTERNAL PARAMETER REQUEST TRANSMITTED FROM CLIENT SERVER?
NO
YES
S11-2
HAS EXTERNAL DATABASE BEEN UPDATED?
NO
YES
S11-4
S11-3
TRANSMITS EXTERNAL DATABASE SELECTION ITEMS TO CLIENT SERVER
NOTIFY CLIENT SERVER THAT EXTERNAL DATABASE HAS NOT BEEN UPDATED
S11-5
IS SELECTED PAPER SELECTION ITEM TRANSMITTED FROM CLIENT SERVER?
NO
YES
S11-6
RECEIVE ENVIRONMENT INFORMATION ON IMAGE FORMING APPARATUS (TEMPERATURE, HUMIDITY)
S11-7
RETRIEVE OPTIMUM EXTERNAL PARAMETERS FROM EXTERNAL DATABASE BASED ON SELECTED PAPER SELECTION AND ENVIRONMENT INFORMATION
S11-8
TRANSMIT RETRIEVED EXTERNAL PARAMETERS TO CLIENT SERVER

FIG. 12

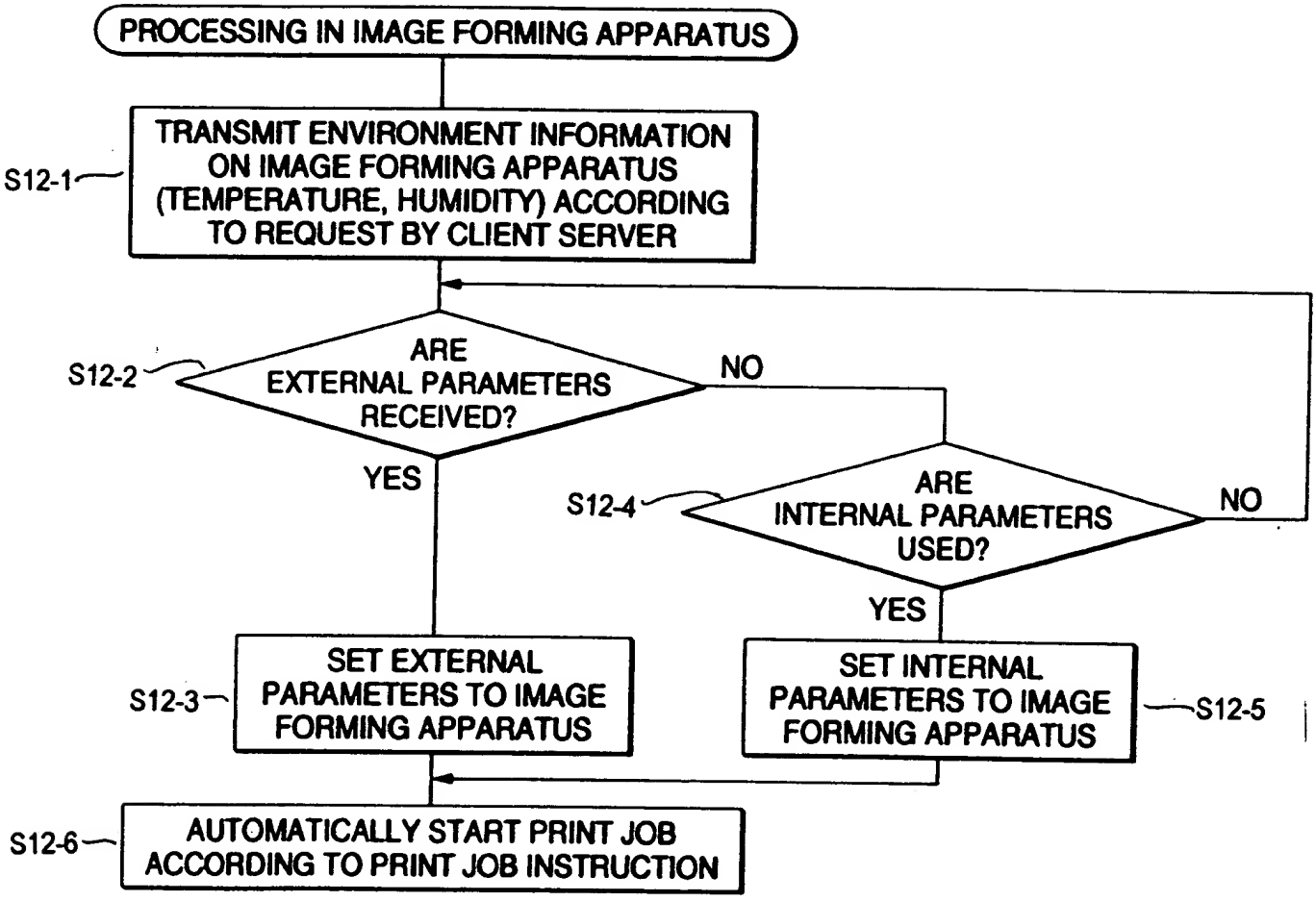

PROCESSING IN IMAGE FORMING APPARATUS
S12-1
TRANSMIT ENVIRONMENT INFORMATION ON IMAGE FORMING APPARATUS (TEMPERATURE, HUMIDITY) ACCORDING TO REQUEST BY CLIENT SERVER
S12-2
ARE EXTERNAL PARAMETERS RECEIVED?
NO
YES
S12-4
ARE INTERNAL PARAMETERS USED?
NO
YES
S12-3
SET EXTERNAL PARAMETERS TO IMAGE FORMING APPARATUS
SET INTERNAL PARAMETERS TO IMAGE FORMING APPARATUS
S12-5
S12-6
AUTOMATICALLY START PRINT JOB ACCORDING TO PRINT JOB INSTRUCTION

FIG. 13

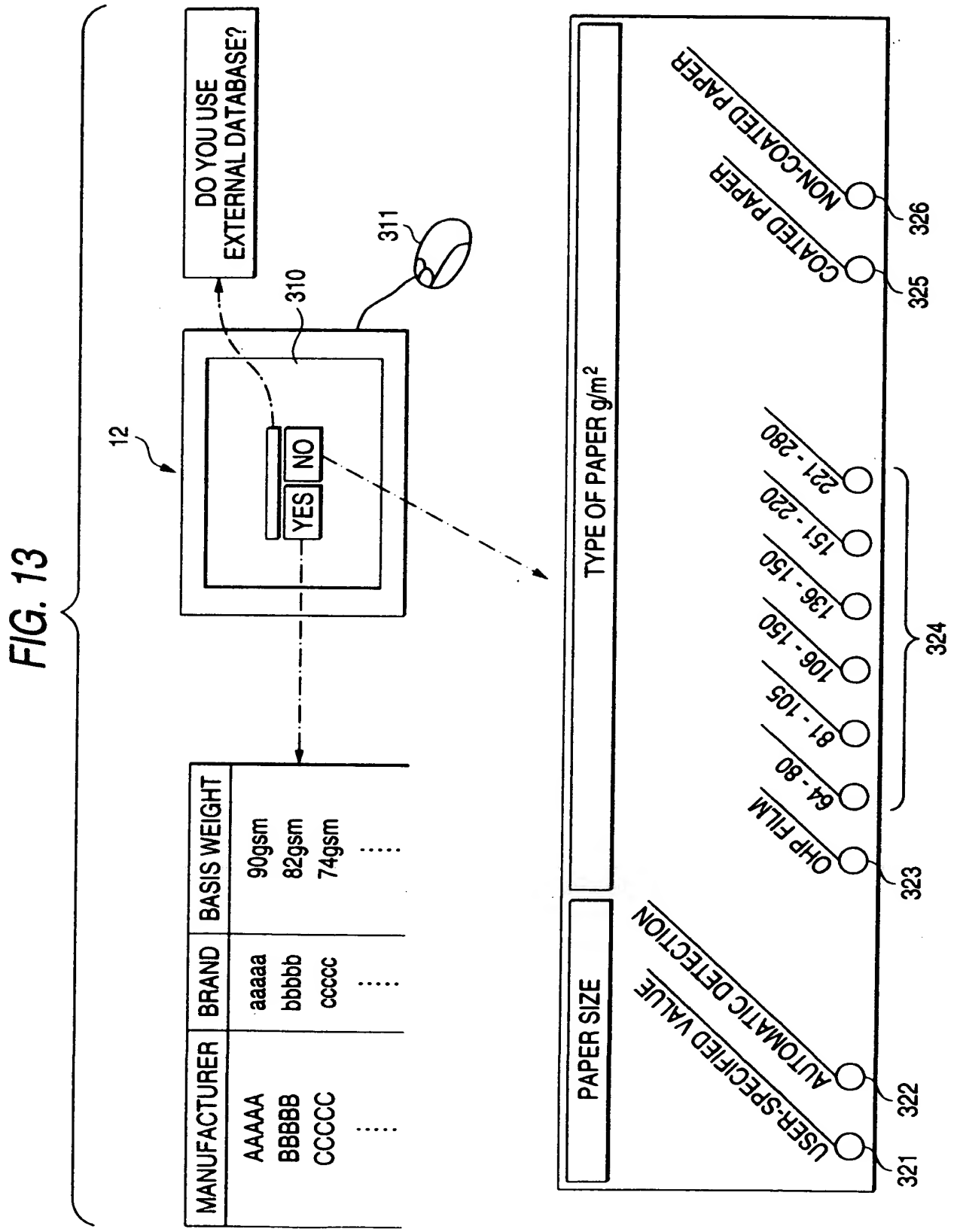

DO YOU USE EXTERNAL DATABASE?
311
310
12
YES
NO
MANUFACTURER
BRAND
BASIS WEIGHT
AAAAA
BBBBB
CCCCC
aaaaa
bbbbb
ccccc
90gsm
82gsm
74gsm
PAPER SIZE
TYPE OF PAPER g/m²
USER-SPECIFIED VALUE
AUTOMATIC DETECTION
OHP FILM
64 - 80
81 - 105
106 - 150
136 - 150
151 - 220
221 - 280
COATED PAPER
NON-COATED PAPER
321
322
323
324
325
326

FIG. 14

MANUFACTURER	BRAND	BASIS WEIGHT	TEMPERATURE	HUMIDITY	BIAS ROLL	AIR BLOWER	TRANSFER VOLTAGE
AAAAA	aaaaa	90gsm	~ 10°C	~ 40%	115 PULSE	ON	y = x + a1
				40 ~ 65%	115 PULSE	ON	y = x
				65 ~ 70%	70 PULSE	ON	y = x + a2
				70% ~	65 PULSE	ON	y = x + a2
			10 ~ 18°C	~ 40%	70 PULSE	ON	y = x + a1
				40 ~ 65%	60 PULSE	ON	y = x + a1
				65 ~ 70%	60 PULSE	ON	y = x
				70% ~	55 PULSE	ON	y = x
			18 ~ 25°C	~ 40%	70 PULSE	ON	y = x + a1
				40 ~ 65%	60 PULSE	ON	y = x + a1
				65 ~ 70%	60 PULSE	ON	y = x
				70% ~	55 PULSE	ON	y = x
			25°C ~	~ 40%	70 PULSE	ON	y = x
				40 ~ 65%	60 PULSE	ON	y = x
				65 ~ 70%	60 PULSE	ON	y = x
				70% ~	55 PULSE	ON	y = x
BBBBB	bbbbb	82gsm	~ 10°C	~ 40%	130 PULSE	OFF	y = x + a1
				40 ~ 65%	110 PULSE	OFF	y = x + a3
				65 ~ 70%	60 PULSE	OFF	y = x + a3
				70% ~	60 PULSE	OFF	y = x + a3
			10 ~ 18°C	~ 40%	85 PULSE	OFF	y = x + a1
				40 ~ 65%	70 PULSE	OFF	y = x + a1
				65 ~ 70%	70 PULSE	OFF	y = x + a3
				70% ~	65 PULSE	OFF	y = x + a3
			18 ~ 25°C	~ 40%	85 PULSE	OFF	y = x + a1
				40 ~ 65%	70 PULSE	OFF	y = x + a1
				65 ~ 70%	70 PULSE	OFF	y = x + a3
				70% ~	65 PULSE	OFF	y = x + a3
			25°C ~	~ 40%	75 PULSE	OFF	y = x + a4
				40 ~ 65%	70 PULSE	OFF	y = x + a4
				65 ~ 70%	70 PULSE	OFF	y = x + a4
				70% ~	60 PULSE	OFF	y = x + a4
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 15A

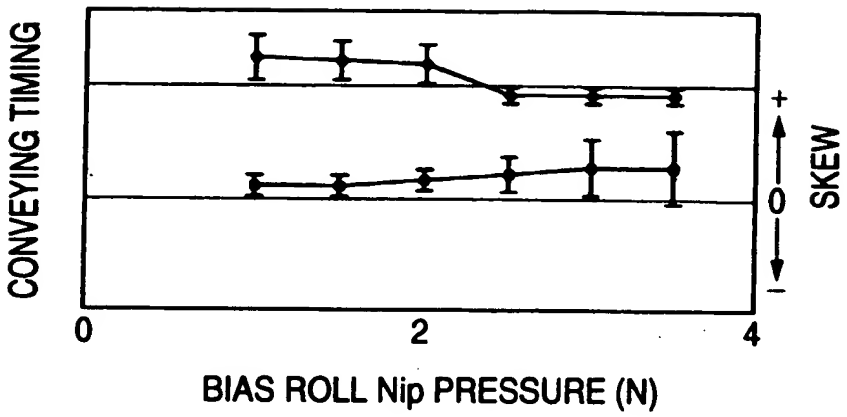


FIG. 15B

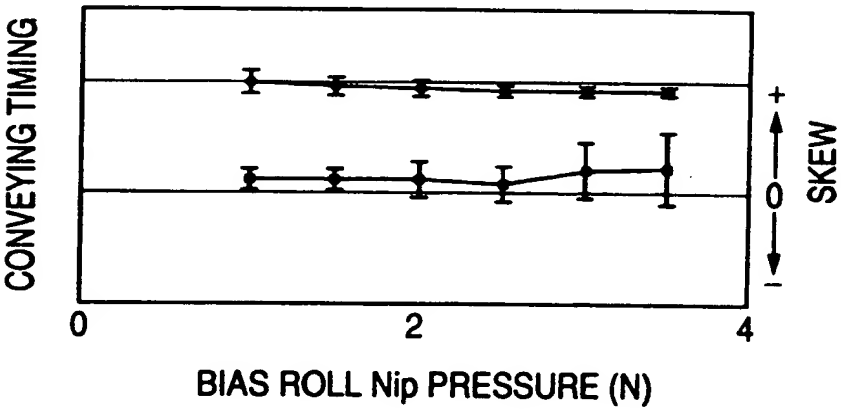


FIG. 15C

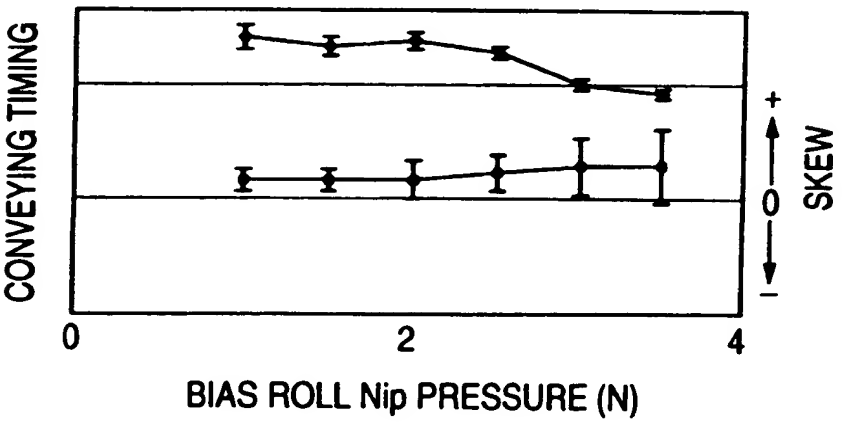


FIG. 16

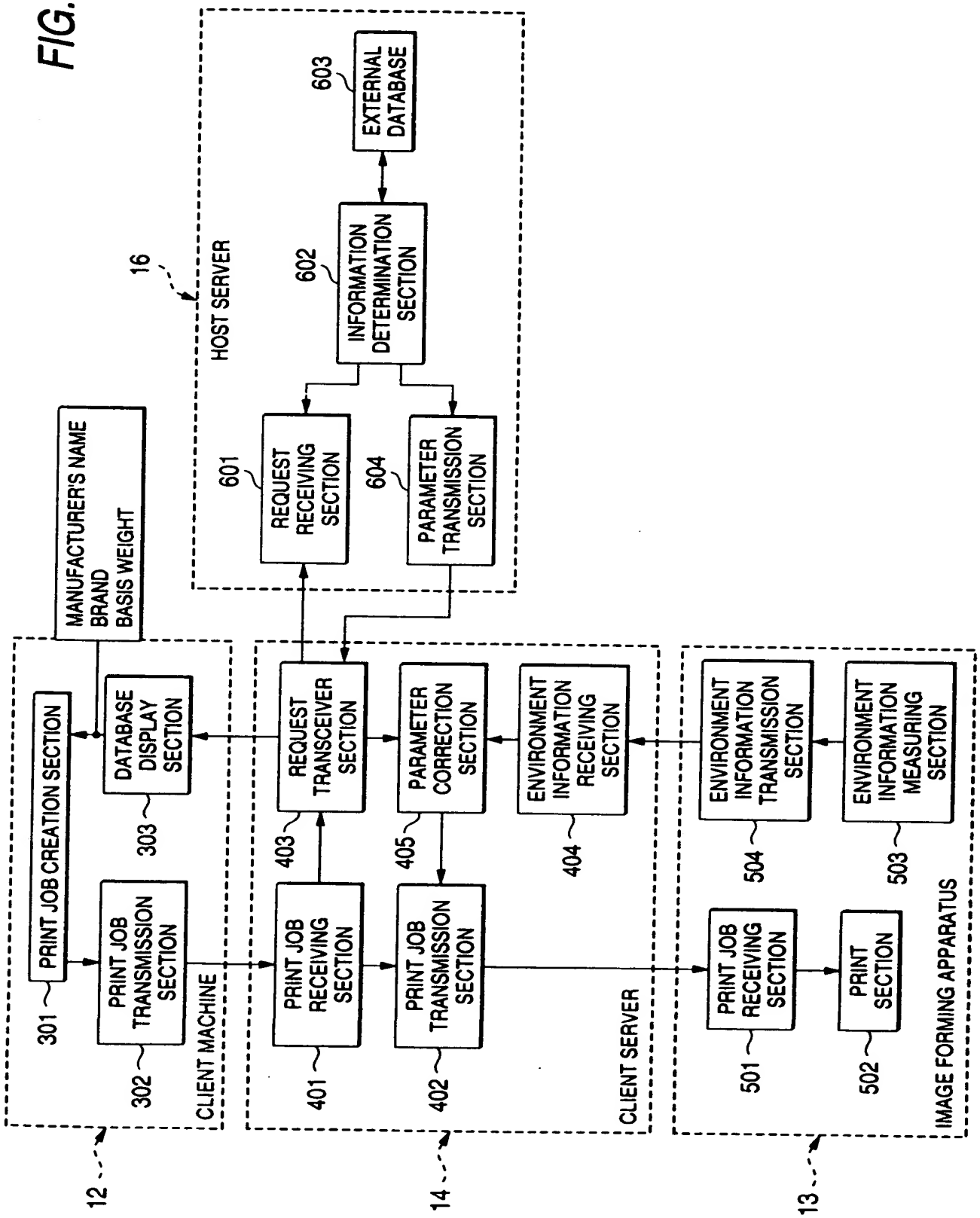
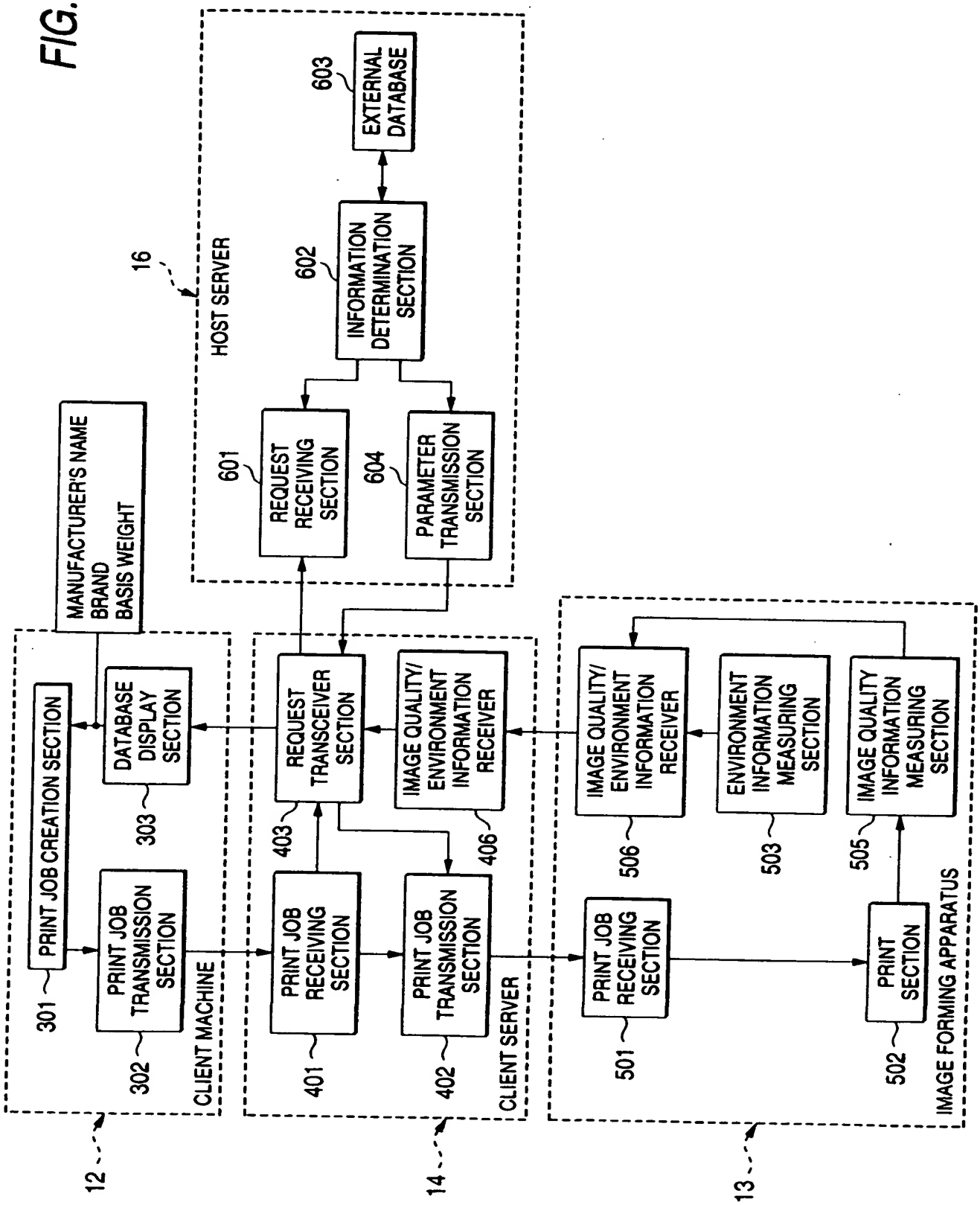

16
HOST SERVER
603
EXTERNAL DATABASE
602
INFORMATION DETERMINATION SECTION
601
REQUEST RECEIVING SECTION
604
PARAMETER TRANSMISSION SECTION
MANUFACTURER'S NAME
BRAND
BASIS WEIGHT
301
PRINT JOB CREATION SECTION
303
DATABASE DISPLAY SECTION
302
PRINT JOB TRANSMISSION SECTION
CLIENT MACHINE
12
403
REQUEST TRANSCEIVER SECTION
405
PARAMETER CORRECTION SECTION
404
ENVIRONMENT INFORMATION RECEIVING SECTION
401
PRINT JOB RECEIVING SECTION
402
PRINT JOB TRANSMISSION SECTION
CLIENT SERVER
14
504
ENVIRONMENT INFORMATION TRANSMISSION SECTION
503
ENVIRONMENT INFORMATION MEASURING SECTION
501
PRINT JOB RECEIVING SECTION
502
PRINT SECTION
IMAGE FORMING APPARATUS
13

FIG. 17


16
HOST SERVER
603
EXTERNAL DATABASE
602
INFORMATION DETERMINATION SECTION
601
REQUEST RECEIVING SECTION
604
PARAMETER TRANSMISSION SECTION
MANUFACTURER'S NAME
BRAND
BASIS WEIGHT
PRINT JOB CREATION SECTION
DATABASE DISPLAY SECTION
REQUEST TRANSCEIVER SECTION
IMAGE QUALITY/ ENVIRONMENT INFORMATION RECEIVER
IMAGE QUALITY/ ENVIRONMENT INFORMATION RECEIVER
ENVIRONMENT INFORMATION MEASURING SECTION
IMAGE QUALITY INFORMATION MEASURING SECTION
301
303
403
406
506
503
505
PRINT JOB TRANSMISSION SECTION
PRINT JOB RECEIVING SECTION
PRINT JOB TRANSMISSION SECTION
PRINT JOB RECEIVING SECTION
PRINT SECTION
302
401
402
501
502
CLIENT MACHINE
CLIENT SERVER
IMAGE FORMING APPARATUS
12
14
13